

## **Abstract**

Alzheimer's disease is a progressive neurodegenerative disease which is currently the most common type of middle-aged and elderly dementia, and its prevalence is increasing every year, which has a negative socioeconomic impact on society. People with Alzheimer's disease most commonly suffer from cognitive decline, memory impairment, and loss of ability to perform activities of daily living. Modern medical procedures offer patients only with symptomatic relief, but they do not stop the progression of the disease. For these reasons, great emphasis is placed on the development and testing of reliable animal models that could most accurately reproduce the pathogenesis and symptoms of the disease, and the use of which in preclinical research would yield results applicable in its clinical phase as well. Translational research combines the knowledge of basic research with the development of new diagnostic and therapeutic methods with use in clinical practice and enables the faster discovery of new biomarkers and the creation of new, more effective drugs. This work focuses on translational research in Alzheimer's disease in the field of learning and memory disorders.

**Key words:** Alzheimer's disease, declarative memory, spatial memory, hippocampus, behavior, neurodegeneration